NATIONAL PIPE PRODUCTS

L-1 to L-4 & R-2 to R-4, Site No.15, (335/25/14)
Mahadeshwaranagar, Herohalli Village
Sunkadkatte, Bangalore-560091. India

Phone : +91 7846986160
E-mail : info@vippipe.com
Website : www.vippipe.com
GST # 29 AAJFN 4830 G1Z4

DATA SHEET

RIGID PVC ROUND CONDUIT

Make	:	VIP
Product	:	Rigid PVC Round Conduit
Specification	:	IS: 9537 Part - 3 - 1983
Dimension	:	19 mm to 50 mm

Dimensions of Round Conduits IS: 9537 Part 3 - 1983

Nominal Size	Outside Diameter	Tolerance on OD	Inside Diameter (Min) in mm		
mm	**mm**	**mm**	**Light**	**Medium**	**Heavy**
16	16	-0.3	13.7	13.0	12.2
19 (Non Std)	19	-0.3	16.4	15.9	**14.8**
20	**20**	**-0.3**	17.4	16.9	**15.8**
25	**25**	**-0.4**	22.1	21.4	**20.6**
32	**32**	**-0.4**	28.6	**27.8**	26.6
40	40	-0.4	35.8	**35.4**	34.4
50	50	-0.5	**45.1**	44.3	43.2

Wall Thickness in mm

Size	Light	Medium	Heavy
16	1.00 – 1.15	1.35 – 1.50	1.75 – 1.90
19	1.15 – 1.30	1.40 – 1.55	1.90 – 2.10
20	1.15 – 1.30	1.40 – 1.55	1.90 – 2.10
25	1.25 – 1.45	1.60 – 1.80	1.90 – 2.10
32	1.50 – 1.70	1.90 – 2.10	2.50 – 2.70
40	1.90 – 2.10	2.10 – 2.30	2.60 – 2.80
50	2.10 – 2.30	2.60 – 2.85	3.15 – 3.40



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MATERIAL DATA

RIGID PVC ROUND CONDUIT

01.	Material	:	Polyvinylchloride (PVC) Conduit
02.	Impact Resistance	:	High Impact Resistance
03.	Tensile Strength of PVC	:	450/565Kg/cm²
04.	Chemical Resistance of PVC	:	Unaffected by Inorganic Acid, Alkalis & Salt, Crude & Petrochemicals
05.	Coefficient of linear Expansion of PVC	:	7x10/mm/°C
06.	Flammability of PVC	:	Fire Retardant
07.	Vicat Softening Point of PVC	:	80º C at 5 Kg load / 50 N
08.	Oxygen Index of PVC	:	<21%
09.	Electric Strength of Conduit	:	No breakdown at 2 KV
10.	Insulation Strength of Conduit	:	> 100MΩ
11.	Operative Temperature of Conduit	:	- 5º C + 60º C
12.	Length of Conduit	:	3 mtr

PVC and uPVC are both the same. The "**U**" in **u**PVC stands for **Unplasticized** Poly Vinyl Chloride meaning, NO Plasticizer / Oil has been used in the manufacturing of the Rigid PVC Conduit. PVC conduits manufactured without using a Plasticizer are Rigid in nature thereby terming them uPVC / PVC conduits. Plasticizer / Oil are used for manufacturing of Garden Hose Pipe used to water plants / lawn.

The use of Plasticizer / Oil results in softening of the conduit and also results in Sagging of the conduit depending on the weight of the wires running through it or when exposed to Heat / Sun.

We **do not use and kind of Plasticizer** during the manufacturing process of VIP Make Rigid uPVC / PVC conduits and hence they are Rigid in nature.

Manufacturers Test Certificate is issued for conduits manufactured as per IS:9537 specification and bearing the ISI Mark only.

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Bangalore - 560091

VIP ISI MARKED PVC CONDUIT

TECHNICAL DATA SHEET

<table>
<tr><th>SL No</th><th>PROPERTY</th><th>DATA</th></tr>
<tr><td>1</td><td>Make</td><td>VIP ISI MARKED RIGID PVC CONDUITS</td></tr>
<tr><td>2</td><td>Applied Standard</td><td>IS:9537 (Part III) 1983</td></tr>
<tr><td>3</td><td>B I S Licence #</td><td>CM/L - 6200014982</td></tr>
<tr><td>4</td><td>Dimensions</td><td>
<table>
<tr><td>Nominal Size</td><td>Outside Diameter</td><td>Tolerance on OD</td><td colspan="3">Inside Diameter (Min) in mm</td></tr>
<tr><td>mm</td><td>mm</td><td>mm</td><td>LIGHT</td><td>MEDIUM</td><td>HEAVY</td></tr>
<tr><td>16</td><td>16</td><td>-0.30</td><td>13.70</td><td>13.00</td><td>12.20</td></tr>
<tr><td>19 (Non Std)</td><td>19</td><td>-0.30</td><td>16.40</td><td>15.90</td><td>14.80</td></tr>
<tr><td>20</td><td>20</td><td>-0.30</td><td>17.40</td><td>16.90</td><td>15.80</td></tr>
<tr><td>25</td><td>25</td><td>-0.40</td><td>22.10</td><td>21.40</td><td>20.60</td></tr>
<tr><td>32</td><td>32</td><td>-0.40</td><td>28.60</td><td>27.80</td><td>26.60</td></tr>
<tr><td>40</td><td>40</td><td>-0.40</td><td>35.80</td><td>35.40</td><td>34.40</td></tr>
<tr><td>50</td><td>50</td><td>-0.50</td><td>45.10</td><td>44.30</td><td>43.20</td></tr>
</table>
</td></tr>
<tr><td>5</td><td>Length</td><td>Standard length of the conduit is 3 Meters.</td></tr>
<tr><td>6</td><td>Bending Test</td><td>After the test on samples at room temperature, the samples shall show no cracks visible to normal vision without magnification. Bending Test is applicable for 16mm, 20mm and 25 mm.</td></tr>
<tr><td>7</td><td>Compression Test</td><td>25% of compression allowed under load of 1250N for Heavy and Medium Conduits and 10% allowed after releasing the load.</td></tr>
<tr><td>8</td><td>Impact Test</td><td>After the test on Samples at specified temp, there shall be on sign of disintegration and crack visible to naked eye in at least nine out of twelve Samples.</td></tr>
<tr><td>9</td><td>Collapse Test</td><td>After the test on the conditioned samples, it shall be possible to pass gauge of specified diameter for conduits of 16 mm to 25 mm diameter in Light, Medium and Heavy Mechanical stresses.</td></tr>
<tr><td>10</td><td>Resistance to Heat</td><td>After the test, Ball diameter of impression on the sample shall not exceed 2mm.</td></tr>
<tr><td>11</td><td>Resistance to burning</td><td>Flame shall die out in less than 30 seconds after removal of burner.</td></tr>
</table>

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12	Electrical Characteristics	**(a) Di-electric strength** No breakdown of conditioned sample shall occur at the voltage of 2000v &50Hz frequency for 15 minutes. **(b) Insulation Resistance** The insulation Resistance on conditioned Samples shall not be less than 100MΩ.
13	Colours	**VIP ISI MARKED PVC CONDUITS** are available in Seven Colours. Namely, Black, White, Grey, Red, Blue, Green and Orange. Special colours against requirements can also be produced.
	F R L S TESTS:	**ALL OUR CONDUITS ARE FRLS BY DEFAULT.** **FRLS IS AS PER ASTM STANDARD** **OUR CLAIM OF FRLS IS NOT APPROVED BY BIS** **THE BUREAU OF INDIAN STANDARDS DOES NOT ALLOW FRLS TO BE MARKED ON ISI MARKED CONDUITS SINCE THE SAME IS NOT COVERED UNDER IS: 9537**
1	Oxygen Index Test (ASTM – D 2863 – 1987)	The minimum concentration of oxygen flowing upward in test column under equilibrium conditions should be minimum 21%, expressed as volume percent. **Result Obtained – 30%.**
2	Temperature Index Test (ASTM – D 2863 – 1987)	The specific requirement under this test is minimum 250 ˚C. **Result Obtained – 262 ˚C.**
3	Smoke Density Test (ASTM – E – 662 – 1983)	Clear Beam Reading should range from a minimum of 0% to a maximum of 100%. **Result Obtained – 96% Clear Beam.**
4	Flammability Test (ASTM – D – 635 – 1981)	**(i) Average Extent of Burning:** The specific requirement on the average extent of Burning is < 25 mm. **Result Obtained – 18 mm** (ii)**Average Time of Burning:** The specific requirement on the average time of Burning is < 10 Sec. **Result Obtained – 4 mm**
5	Halogen Acid Generation Test (IEC – 754 – Part 1, 1994)	The maximum Halogen Acid Generation allowed under this test is 200 mg/gm **Result Obtained – 181 mg/gm**

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GST # 29 AAJFN 4830 G1Z4

01.04.2025

Whom So Ever It May Concern

This is to inform you that we are no longer marking **FRLS** on VIP **Make ISI** Marked PVC Conduits as the same is objected by the Bureau of Indian Standards (BIS circular attached).

However, we assure you that **ALL OUR CONDUITS ARE FRLS** and 3rd Party Test Reports for FRLS Conformity is obtained from CIPET Laboratory annually and uploaded on our website www.vippipe.com.

VIP **Make FRLS PVC conduits** are available in 19 mm and 25 mm HMS (Heavy) And these conduits **will not bear the ISI Mark**. However, we assure you that the quality is same as ISI marked PVC Conduits.

Above is for your information.

Thanking You,

Yours Faithfully,

For NATIONAL PIPE PRODUCTS

PARTNER

VIP EXTRUSIONS
268/269/2B, Pipe Line Road, Mahadeshwara Nagar, Sunkadakatte, Bangalore-560 091.
Phone :080 - 23281338 Email : info@vipextrusions.com Website : www.vipextrusions.com
PH: +91 9343526661 Mfrs. of "2LUL" Brand PVC FRLS Conduits with ISI Mark. Since 1982
GSTIN # 29 AALFV 3998 H1Z9

01.04.2025

Whom So Ever It May Concern

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Above is for your information.

Thanking You,

Yours Faithfully,

For VIP EXTRUSIONS
Partner

भारतीय मानक ब्यूरो
Bureau of Indian Standards
The National Standards Body of India

Address: Kochi Branch Office,
II Floor, CWC Office Complex,
Maveli Road, Gandhi Nagar,
Kadavanthara, Kochi, Kerala - 682020
Phones: 0484-2207174,2207175
E-Mail: kobo@bis.gov.in
Web: www.bis.gov.in

SPEED POST / EMAIL

संदर्भ/Our Ref: KOBO/5:1

दिनांक:/ Date: 22 Mar 2021

विषय/Subject: Misleading claims made by conduit manufacturers on insulating conduits

To,
Shankar S Kumar

महोदय / Sir,

This has reference to your mail dated 02 March 2021, seeking clarification regarding printing of misleading claims like "FRLS" on Conduits of Insulating Materials.

It may kindly be noted that marking of claims like "FRLS" on Conduits of Insulating Materials, which are not verifiable in accordance with the relevant Indian Standard is not permitted. Such additional claims which are over and above the aspects/ characteristics prescribed in the ISS, mislead the users as it may be construed that such markings are approved by BIS.

An advisory has already been issued to all manufacturers of Conduits of Insulating Materials (IS 9537 (Part 3)) to refrain from marking such claims on conduits.

भवदीय/Yours faithfully,

(Sreejith Mohan J)
Scientist-C

श्रीजित जे /SREEJITH MOHAN J
वैज्ञानिक सी / Scientist C
भारतीय मानक ब्यूरो / Bureau of Indian Standards
दूसरा तल / IInd Floor
सीडब्ल्यूसी ऑफिस कॉम्प्लेक्स / CWC Office Complex
मावली रोड, गांधी नगर / Maveli Road, Gandhi Nagar
कडवनथरा पी. ओ. / Kadavanthara P.O.
कोच्ची-682 020 / Kochi-682 020

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DIMENSIONS OF VIP MAKE BENDS

01.12.2021

DIMENSION OF VIP MAKE BENDS		
NOMINAL SIZE	**TAPERED INNER DIAMETER FROM MOUTH**	**WALL THICKNESS**
19	19.10 TO 18.70	1.80 TO 2.00
20	20.10 TO 19.70	1.80 TO 2.00
25	25.10 TO 24.70	1.80 TO 2.00
32	32.10 TO 31.70	1.80 TO 2.00
40	40.10 TO 39.70	2.00 TO 2.20
50	50.10 TO 49.60	2.00 TO 2.20

All dimensions in millimeter



For National Pipe Products

Authorized Signatory

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DIMENSIONS OF VIP MAKE COUPLER

01.12.2021

DIMENSION OF VIP MAKE COUPLERS			
NOMINAL SIZE	**TAPERED INNER DIAMETER FROM MOUTH**	**WALL THICKNESS**	**MIN LENGTH**
19	19.10 TO 18.70	1.80 TO 2.00	55
20	20.10 TO 19.70	1.80 TO 2.00	55
25	25.10 TO 24.70	1.80 TO 2.00	60
32	32.10 TO 31.70	1.80 TO 2.00	75
40	40.10 TO 39.70	2.00 TO 2.20	85
50	50.10 TO 49.60	2.00 TO 2.20	100

All dimensions in millimeter



For National Pipe Products

Authorized Signatory

National Pipe Products
 # 14 & 15 (335/25-14)
Magadi Road, Herohalli,
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Bangalore - 560091

MAKE PVC SURFACE CIRCULAR JUNCTION BOX

SPECIFICATIONS FOR 19 MM

19 mm PVC Circular Junction Box:

Outer Diameter	:	64.00 - 65.00 mm
Inner Diameter	:	60.00 - 61.00 mm
Height	:	28.00 - 29.00 mm
Thickness	:	1.60 mm min

Conduit Insert:

Outer Diameter	:	23.50 - 24.00 mm
Inner Diameter	:	18.70 mm min
Insert Length	:	20.00 mm min.
Thickness	:	1.60 mm min.

Material: Poly Vinyl Chloride.



For NATIONAL PIPE PRODUCTS

PARTNER

National Pipe Products
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MAKE PVC SURFACE CIRCULAR JUNCTION BOX

SPECIFICATION FOR 20 MM

20 mm PVC Circular Junction Box:

Outer Diameter	:	64.00 - 65.00 mm
Inner Diameter	:	60.00 - 61.00 mm
Height	:	27.00 - 28.00 mm
Thickness	:	1.60 mm min

Conduit Insert:

Outer Diameter	:	23.00 – 23.50 mm
Inner Diameter	:	19.50 mm min
Insert Length	:	20.00 mm min.
Thickness	:	1.60 mm min.

Material: Poly Vinyl Chloride.



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MAKE PVC SURFACE CIRCULAR JUNCTION BOX

SPECIFICATION FOR 25 MM

25 mm PVC Circular Junction Box:

Outer Diameter	:	645.00 - 66.00 mm
Inner Diameter	:	60.00 - 61.00 mm
Height	:	31.00 - 32.00 mm
Thickness	:	1.60 mm min

Conduit Insert:

Outer Diameter	:	29.00 – 30 mm
Inner Diameter	:	24.50 mm min
Insert Length	:	23.00 mm min.
Thickness	:	1.60 mm min.

Material: Poly Vinyl Chloride.



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MAKE PVC SURFACE CIRCULAR JUNCTION BOX

SPECIFICATION FOR 32 MM

32 mm PVC Circular Junction Box:

Outer Diameter	:	82.00 - 83.00 mm
Inner Diameter	:	76.00 - 77.00 mm
Height	:	49.00 - 50.00 mm
Thickness	:	2.00 mm min

Conduit Insert:

Outer Diameter	:	36.00 – 37.00 mm
Inner Diameter	:	31.70 mm min
Insert Length	:	26.00 mm min.
Thickness	:	2.00 mm min.

Material: Poly Vinyl Chloride.



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MAKE PVC SURFACE SQUARE JUNCTION BOX

SPECIFICATION FOR 32 MM

32 mm PVC Square Junction Box:

Outer Width	:	80.00 - 81.00 mm
Inner Width	:	74.00 - 75.00 mm
Height	:	50.00 - 51.00 mm
Thickness	:	2.75 mm minimum.

Conduit Insert:

Outer Diameter	:	37.00 – 38.00 mm
Inner Diameter	:	31.40 mm min.
Insert Length	:	29.00 mm min.
Thickness	:	2.75 mm min.

Material: Poly Vinyl Chloride.



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MAKE PVC SURFACE SQUARE JUNCTION BOX

SPECIFICATION FOR 40 MM

40 mm PVC Square Junction Box:

Outer Diameter	:	80.00 - 81.00 mm
Inner Diameter	:	73.00 - 74.00 mm
Height	:	49.00 - 50.00 mm
Thickness	:	3.00 mm min

Conduit Insert:

Outer Diameter	:	45.00 – 46.00 mm
Inner Diameter	:	38.50 mm min
Insert Length	:	35.00 mm min.
Thickness	:	3.00 mm min.

Material: Poly Vinyl Chloride.



For NATIONAL PIPE PRODUCTS

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MAKE PVC DEEP CIRCULAR JUNCTION BOX

SPECIFICATION FOR 19 MM

19 mm Deep PVC Circular Junction Box:

Outer Diameter	:	65.00 - 66.00 mm
Inner Diameter	:	61.00 - 62.00 mm
Height	:	62.00 - 63.00 mm
Thickness	:	1.60 mm min

Conduit Insert:

Outer Diameter	:	22.50 - 23.00 mm
Inner Diameter	:	18.70 mm min
Insert Length	:	20.00 mm min.
Thickness	:	1.60 mm min.

Material: Poly Vinyl Chloride.



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MAKE PVC DEEP CIRCULAR JUNCTION BOX

SPECIFICATIONS FOR 20 MM

20 mm Deep PVC Circular Junction Box:

Outer Diameter	:	64.00 - 65.00 mm
Inner Diameter	:	60.50 – 61.50 mm
Height	:	66.00 - 67.00 mm
Thickness	:	1.60 mm min

Conduit Insert:

Outer Diameter	:	23.50 - 24.00 mm
Inner Diameter	:	19.50 mm min
Insert Length	:	20.00 mm min.
Thickness	:	1.60 mm min.

Material: Poly Vinyl Chloride.



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MAKE PVC CIRCULAR DEEP JUNCTION BOX

SPECIFICATIONS FOR 25 MM

25 mm Deep PVC Circular Junction Box:

Outer Diameter	:	65.00 - 66.00 mm
Inner Diameter	:	60.00 - 61.00 mm
Height	:	64.00 - 65.00 mm
Thickness	:	1.60 mm min

Conduit Insert:

Outer Diameter	:	29.00 - 30.00 mm
Inner Diameter	:	24.50 mm min
Insert Length	:	24.00 mm min.
Thickness	:	1.60 mm min.

Material: Poly Vinyl Chloride.



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MAKE PVC DEEP CIRCULAR JUNCTION BOX

SPECIFICATION FOR 32 MM

32 mm PVC Deep Circular Junction Box:

Outer Diameter	:	81.00 - 82.00 mm
Inner Diameter	:	76.00 - 77.00 mm
Height	:	50.00 - 51.00 mm
Thickness	:	2.00 mm min

Conduit Insert:

Outer Diameter	:	36.00 - 37.00 mm
Inner Diameter	:	31.00 mm min
Insert Length	:	26.50 mm min.
Thickness	:	2.00 mm min.

Material: Poly Vinyl Chloride.



For NATIONAL PIPE PRODUCTS

PARTNER

NATIONAL PIPE PRODUCTS

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GST # 29 AAJFN 4830 G1Z4

General Specifications for Metal Junction Boxes – VIP

19 / 20 mm Surface Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	26 – 27 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	25 mm
Inner Diameter	:	21 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.



25 mm Surface Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	26 - 27 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	30 mm
Inner Diameter	:	26 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.

For NATIONAL PIPE PRODUCTS

PARTNER AUTHORISED

NATIONAL PIPE PRODUCTS

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General Specifications for Metal Junction Boxes – VIP

19 / 20 mm Deep Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	56 – 57 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	25 mm
Inner Diameter	:	21 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.



25 mm Deep Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	60 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	30 mm
Inner Diameter	:	26 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.

For NATIONAL PIPE PRODUCTS

PARTNER AUTHORISED

NATIONAL PIPE PRODUCTS

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Website : www.vippipe.com
GST # 29 AAJFN 4830 G1Z4

General Specifications for Metal Junction Boxes – HOMLITE / VIP

19 / 20 mm Surface Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	26 – 27 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	25 mm
Inner Diameter	:	21 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.



25 mm Surface Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	26 - 27 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	30 mm
Inner Diameter	:	26 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.

For NATIONAL PIPE PRODUCTS

PARTNER AUTHORISED

NATIONAL PIPE PRODUCTS

L-1 to L-4 & R-2 to R-4, Site No.15, (335/25/14)
Mahadeshwaranagar, Herohalli Village
Sunkadkatte, Bangalore-560091. India

Phone : +91 7846986160
E-mail : info@vippipe.com
Website : www.vippipe.com
GST # 29 AAJFN 4830 G1Z4

General Specifications for Metal Junction Boxes – HOMLITE

19 / 20 mm Surface Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	26 – 27 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	25 mm
Inner Diameter	:	21 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.



25 mm Surface Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	26 - 27 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	30 mm
Inner Diameter	:	26 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.

For NATIONAL PIPE PRODUCTS

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General Specifications for Metal Junction Boxes – HOMLITE

32 mm Surface Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	55 – 56 mm
Depth	:	59 – 60 mm
Thickness	:	1.75 – 2.0 mm



Conduit Insert:

Outer Diameter	:	38 mm
Inner Diameter	:	33 mm
Thickness	:	2.5 mm

Material: Cast Iron Steel with Black enamel paint.

For NATIONAL PIPE PRODUCTS

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Website : www.vippipe.com
GST # 29 AAJFN 4830 G1Z4

General Specifications for Metal Junction Boxes – HOMLITE

19 / 20 mm Deep Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	56 – 57 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	25 mm
Inner Diameter	:	21 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.



25 mm Deep Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	60 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	30 mm
Inner Diameter	:	26 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.

For NATIONAL PIPE PRODUCTS

PARTNER AUTHORISED

NATIONAL PIPE PRODUCTS

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GST # 29 AAJFN 4830 G1Z4

General Specifications for Metal Junction Boxes – HOMLITE / VIP

19 / 20 mm Deep Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	56 – 57 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	25 mm
Inner Diameter	:	21 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.



25 mm Deep Metal Junction Box:

Outer Diameter	:	60 – 61 mm
Inner Diameter	:	56 – 57 mm
Depth	:	60 mm
Thickness	:	1.75 – 2.0 mm

Conduit Insert:

Outer Diameter	:	30 mm
Inner Diameter	:	26 mm
Thickness	:	2.0 mm

Material: Cast Iron Steel with Black enamel paint.

For NATIONAL PIPE PRODUCTS

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National Pipe Products
 # 14 & 15 (335/25-14)
Magadi Road, Herohalli,
YeshwantpurHobli, Sunkadakatte,
Bangalore - 560091

VIP MAKE METAL FAN BOX

SPECIFICATIONS FOR POWDER COATED FAN BOX

Powder Coated Sheet Metal Fan Box:

Outer Diameter	:	100 - 110 mm
Minimum Depth	:	70 mm
Minimum Wall Thickness	:	1.20 mm



Powder coated Lid for Fan Box:

Diameter	:	120 mm
Minimum Thickness	:	1.20 mm

Conduit Insert:

Inserts for 25 mm Dia Conduits	:	4 Nos
Holes for 20 mm Dia Conduits	:	4 Nos

Fan Hook Rod:

Diameter	:	Minimum 10 mm
Total Length of Rod	:	Minimum 250 mm

Colour : Red – Powder Coated

For NATIONAL PIPE PRODUCTS

PARTNER

National Pipe Products
 # 14 & 15 (335/25-14)
Magadi Road, Herohalli,
YeshwantpurHobli, Sunkadakatte,
Bangalore - 560091

VIP MAKE METAL FAN BOX

SPECIFICATIONS FOR PLATED FAN BOX

Plated Sheet Metal Fan Box:

Outer Diameter	:	100 - 110 mm
Minimum Depth	:	70 mm
Minimum Wall Thickness	:	1.20 mm

Plated coated Lid for Fan Box:

Diameter	:	120 mm
Minimum Thickness	:	1.20 mm

Conduit Insert:

Inserts for 25 mm Dia Conduits	:	4 Nos
Holes for 20 mm Dia Conduits	:	4 Nos

Fan Hook Rod:

Diameter	:	Minimum 10 mm
Total Length of Rod	:	Minimum 250 mm

Colour : Yellowish - Plated

For NATIONAL PIPE PRODUCTS

PARTNER

NATIONAL PIPE PRODUCTS

L-1 to L-4 & R-2 to R-4, Site No.15, (335/25/14)
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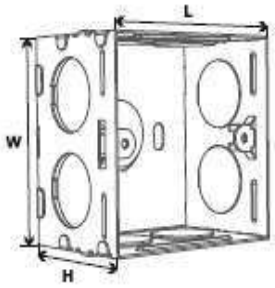
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Website : www.vippipe.com
GST # 29 AAJFN 4830 G1Z4

VIP© MAKE CONCEALEAD GALVANIZED MODULAR BOXES

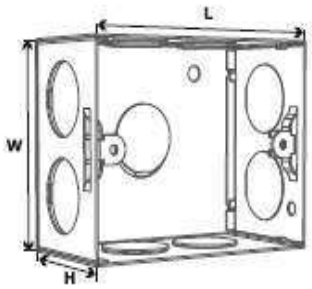
TECHNICAL DATA SHEET

Sl	Item Descriptions	Dimensions			Thickness	No. of Knockouts	Knockout Dia		Packing Per Box
		Length	Width	Height			20 mm	25 mm	
Concealed GI Metal Boxes - 20 Gauge									
1	1/2 Module	75	79	50	1.0 mm	9	0	9	66
2	3 Module	98	79	50	1.0 mm	9	0	9	54
3	4 Module	135	79	50	1.0 mm	11	0	11	36
4	6 Module	208	79	50	1.0 mm	14	0	14	24
5	8 Module - Horizantal	230	79	50	1.0 mm	15	0	15	22
6	8 Module - Vertical	135	135	50	1.0 mm	14	0	14	20
7	12 Module	210	135	60	1.0 mm	17	0	17	10
8	16 Module	230	142	60	1.0 mm	17	0	17	10
9	18 Module	210	210	60	1.0 mm	19	0	19	6
Concealed GI Metal Boxes - 18 Gauge									
1	1/2 Module	75	79	50	1.2 mm	9	0	9	66
2	3 Module	98	79	50	1.2 mm	9	0	9	54
3	4 Module	138	79	50	1.2 mm	11	0	11	36
4	6 Module	209	79	50	1.2 mm	14	0	14	24
5	8 Module - Horizantal	230	79	50	1.2 mm	15	0	15	22
6	8 Module - Vertical	135	135	50	1.2 mm	14	0	14	20
7	12 Module	209	134	60	1.2 mm	17	0	17	10
8	16 Module	230	142	60	1.2 mm	17	0	17	10
9	18 Module	210	210	60	1.2 mm	19	0	19	6
All sizes in mm, Tolerance - ± 2mm		Fits switches of most major brands except Livia from Schneider Electric							

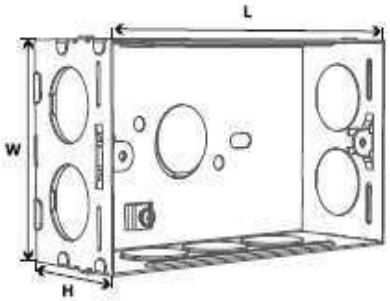
1/2 MODULE



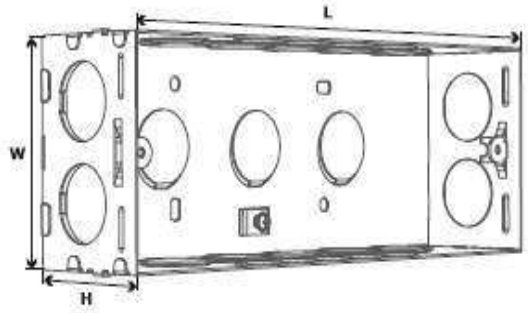
3 MODULE



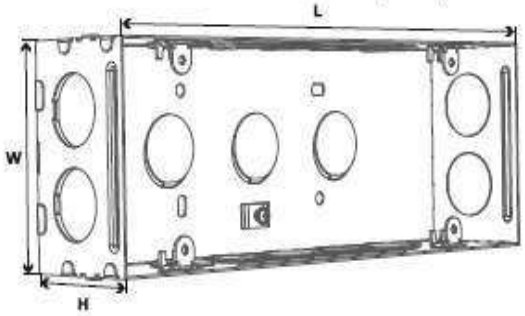
4 MODULE



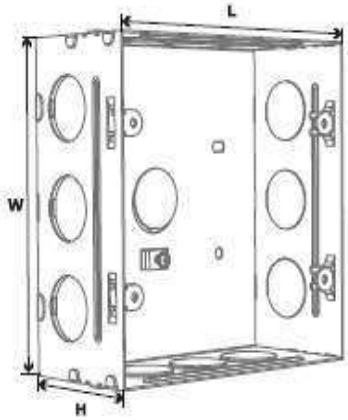
6 MODULE



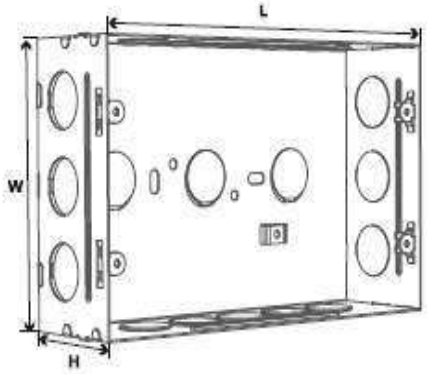
8 MODULE (HOR)



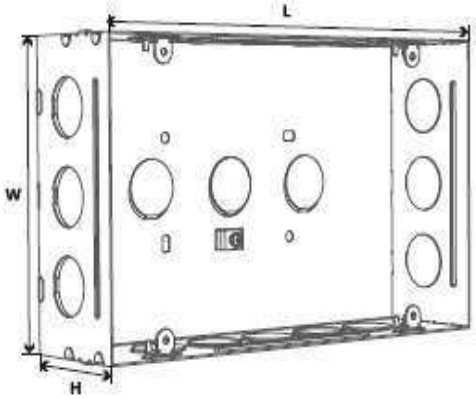
8 MODULE (SQ)



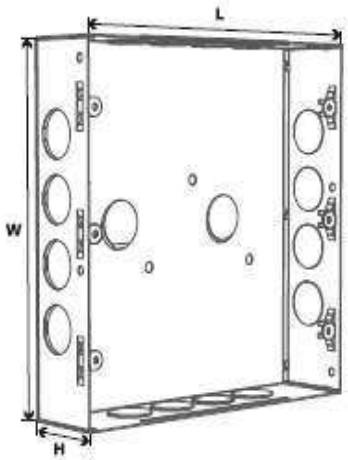
12 MODULE



16 MODULE



18 MODULE



For National Pipe Products

Authorized Signatory

NATIONAL PIPE PRODUCTS

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GST # 29 AAJFN 4830 G1Z4

MATERIAL SAFETY DATA SHEET

PVC Clear Solvent Cement

SECTION I - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT : **VIP Make PVC Solvent cement**
USE: Solvent Cement for PVC Conduits

SECTION 2 - HAZARDS IDENTIFICATION

Clear liquid with an ethereal and fruity (keton) like odor. Extremely flammable, vapors may cause flash fire. It may cause eye and skin irritation. Inhalation of vapors may cause respiratory irritation and may effect on central nervous system. Swallowing may cause irritation, nausea, vomiting, diarrhea and kidney or liver disorders. May be fatal, if swallowed. Symptoms may be delayed.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS AND COMPOSITION

Tetrahydrofuran (THF)	:	10 – 30%
Methyl Ethyl Ketone (MEK)	:	5 – 25%
Cyclohexanone	:	8 – 30%
Acetone	:	10 – 35%
Ethyl Acetate	:	5 – 20%

SECTION 4 - FIRST AID MEASURES

Skin: Remove contaminated clothing immediately. Wash all exposed areas with soap and water. If irritation develops get medical advice. Remove dried cement with hand cleaner or baby oil.
Eyes: If material gets into eyes or if fumes cause irritation, immediately flush eyes with plenty of water for 15-20minutes and take medical advice immediately.
Inhalation: If symptoms of exposure develop, move to fresh air. If breathing becomes difficult, administer oxygen.Administer artificial respiration if breathing has stopped. Seek immediate medical attention.
Ingestion: Rinse mouth with water. Give 1 or 2 glasses of water or milk to dilute. Do not induce vomiting. Seek medical advice immediately.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Dry chemical powder, carbon dioxide gas or foam. Cool fire exposed container withwater. Water may be ineffective as an extinguishing agent.
Exposure Hazards: Carbon monoxide, carbon dioxide, hydrogen chloride and smoke Flammability
Combustion Products: Carbon monoxide, carbon dioxide, hydrogen chloride and smoke.

SECTION 6 - ACCIDENTAL RELEASE MEASURES (Spill or Leak Procedures)

Remove all sources of ignition and ventilate area. Stop leak if it can be done without risk. Personnel cleaning up the spill should wear appropriate personal protective equipment, including respirators if vapor concentrations are high. Soak up spill with an inert absorbent such as sand, earth or other noncombusting material. Put absorbent materialin covered, labeled metal containers. Prevent liquid from entering watercourses, sewers and natural waterways.

SECTION 7 - HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing of vapor. Wash thoroughly after handling. Keep product away from sparks, flames and source ignition. Use only electrically grounded handling equipment;ensure adequate ventilation. Do not eat; drink or smoke while handling product or in storage area.

Storage: Store in a cool, dry, well-ventilated area away from incompatible materials. Keep away from ignition sources. Follow all precautionary information on container label.

SECTION 8 - PRECAUTIONS TO CONTROL EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS:

Component	OSHA PEL	ACGIH TLV	ACGIH STEL
Tetrahydrofuran (THF)	200 ppm	50 ppm	100 ppm
Methyl Ethyl Ketone (MEK)	200 ppm	200 ppm	300 ppm
Cyclohexanone	50 ppm	20 ppm	50 ppm
Acetone	1000 ppm	500 ppm	750 ppm
Ethyl Acetate	200 ppm	400 ppm	100 ppm

Skin Protection: Rubber gloves are suitable for normal use of the product. For long exposures chemical resistant gloves may be required such as 4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.

Eye Protection: Wear safety glasses with side shields or splash proof chemical goggles

Respiratory Protection: Prevent inhalation of the solvents. Use in a well-ventilated room. If required use proper respirator.

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, heavy syrup liquid
Odor: Ketone, Fruity
pH: Not Applicable
Boiling Point: 56.2°C (133°F) based on first boiling component: Acetone
Boiling Range: 56.2°C (133°F) to 156°C (313°F)
Flash Point: -20°C (-4°F) TCC based on Acetone
Melting/Freezing Point: -16.3°C (-2.65°F) based on the first melting component Cyclohexanone
Auto-ignition temperature: 420°C (788°F) based on Cyclohexanone
Decomposition Temperature: Not Applicable
Flammability: Category 2
Specific Gravity: 0.894 ± 0.05 @23°C ± 2°C
Solubility: Solvent portion completely soluble in water. Resin portion separates out.
Vapor Pressure: 190 mm HG @ 20°C (68°F) Acetone
Vapor density: >2.0 (Air = 1)
Viscosity: Heavy Bodied

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable
Hazardous decomposition products: None in normal use. When forced to burn, this product gives off carbon monoxide (CO), carbon dioxide (CO2), hydrogen chloride (HCl) and smoke.
Conditions to avoid: Keep away from heat, sparks, open flame and other ignition sources.
Incompatible Materials: Caustics, ammonia, inorganic acids, chlorinated compounds, strong oxidizers.

SECTION 11 - TOXICOLOGICAL INFORMATION
Likely Routes of Exposure: Inhalation, Eye and Skin Contact
Acute symptoms and effects:
Inhalation: Severe overexposure may result in nausea, dizziness, and headache. It can cause drowsiness, irritationof eyes and nasal passages.
Eye Contact: Vapor slightly uncomfortable. Overexposure may result in severe eye injury with corneal orconjunctival inflammation on contact with the liquid.
Skin Contact: Liquid contact may remove natural skin oils resulting in skin irritation. Dermatitis may occur with prolonged contact.
Ingestion: May cause nausea, vomiting, diarrhea and mental sluggishness.
Chronic (long-term) effects: None known to humans

SECTION 12 - ECOLOGICAL INFORMATION
Mobility: In normal use, emission of volatile organic compounds to the air takes place. Minimal other adverseeffects include possible ground water contamination from release to soil, sewers, drains or water course.

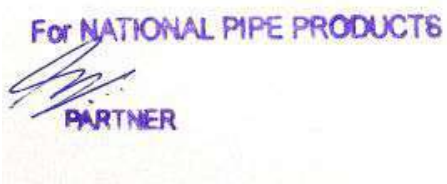
SECTION 13 - WASTE DISPOSAL CONSIDERATIONS
Follow local and national regulations OR Consult disposal expert. Can be disposed of by controlled incineration. Empty containers should be air dried before disposing.

SECTION 14 - TRANSPORT INFORMATION
DOT Classification: CLASS 3: Flammable liquid.
Proper Shipping Name: Adhesives/Solvent Cement

SECTION 15 - REGULATORY INFORMATION
Precautionary Label Information: Highly Flammable, Irritant

SECTION 16 - OTHER INFORMATION
Intended Use of Product: Adhesive for bonding/cementing PVC plastic pipe and fittings
NFPA Hazard Signal: Health: 2 Flammability: 3 Reactivity: 1 Special: None

This product is intended for use by skilled individuals at their own risk. The information contained hereinis based on data considered accurate based on current state of knowledge and experience. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof.



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GST # 29 AAJFN 4830 G1Z4

MATERIAL DATA SHEET

Polypropylene (PP) Flexible Conduit

Nominal Diameter	Maximum Outside Diameter	Tolerance on Outside Diameter	Minimum Inside Diameter	Minimum Bending Radius
20mm	20	-0.3	14.1	60
25mm	25	-0.4	18.3	75
32mm	32	-0.4	24.3	96
40mm	40	-0.4	31.2	160
50mm	50	-0.5	39.6	200

Product : **Polypropylene Flexible Conduits** are the best solutions for applications where resistance to constant flexing and vibration is essential. The conduits display excellent flexibility, moreover, they are light weight and easy to install which makes them very popular.

Size : 20 mm to 50 mm

Specific Gravity : 0.91

Operating Temperature : -5ºC to +60ºC

Colours : White / Grey / Black

Brand Name : ZED - TUBE



Note : Polypropylene (PP) is a Highly Flammable Material

For NATIONAL PIPE PRODUCTS

PARTNER

NATIONAL PIPE PRODUCTS

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Technical Data Sheet

Steel Wire Reinforced FR PVC Flexible Conduit

SIZE	INSIDE DIAMETER	OUTSIDE DIAMETER	PITCH	STEEL WIRE DIAMETER
10 MM	10 MM	15 MM	10 MM	0.8 MM
15 MM	15 MM	20 MM	10 MM	0.8 MM
20 MM	20 MM	25 MM	10 MM	0.8 MM
25 MM	25 MM	30 MM	12 MM	0.8 MM
30 MM	30 MM	35 MM	12 MM	1.0 MM
40 MM	40 MM	45 MM	12 MM	1.0 MM
50 MM	50 MM	55 MM	12 MM	1.0 MM
60 MM	60 MM	65 MM	12 MM	1.2 MM
75 MM	75 MM	80 MM	12 MM	1.2 MM
100 MM	100 MM	106 MM	14 MM	1.4 MM
125 MM	125 MM	131 MM	14MM	1.4 MM
150 MM	150 MM	156 MM	14 MM	1.4 MM

...

Construction : FR PVC Flexible Conduit Reinforced with Steel Wire from within.

Temperature : Can withstand up to 60 ° C.

Standard Colour : Grey

Standard Length : Varies size to size, ranging from 5 Mtr. To 30 Mtr.

Make : Champion



For National Pipe Products

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NATIONAL PIPE PRODUCTS

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VESDA ASPIRATING SMOKE DETECTION

CONDUITS & FITTINGS

TECHNICAL SPECIFICATIONS

A very special category of **CPVC Fire Retardant, Heavy Duty,** Conduit and Fittings are produced as per ASTM F442 for **Very Early Smoke Detection Apparatus (VESDA)**. This provides the piping with a unique flow characteristics and exceptionally smooth interior walls, greatly enhancing system performance.

Nominal Size		Average OD		Average ID		Weight @ Pound per Feet	Weight @ Kg per Mtr	Length in Mtr
Inches	MM	Inches	MM	Inches	MM			
3/4	20.00	1.050	26.70	0.874	22.20	0.168	0.250	3
1	25.00	1.315	33.40	1.101	28.00	0.262	0.390	3
1 1/4	32.00	1.660	42.20	1.394	35.40	0.418	0.622	3
1 1/2	40.00	1.900	48.30	1.598	40.60	0.548	0.816	3
2	50.00	2.375	60.30	2.003	50.90	0.859	1.278	3
2 1/2	65.00	2.875	73.00	2.423	61.50	1.257	1.871	3
3	80.00	3.500	88.90	2.950	75.00	1.867	2.778	3



This category of Heavy Duty, CPVC Conduits and Fittings are suitable for a wide range of operating temperatures from 1.7°C to 65°C. Although tough and durable, care should be taken in extremely cold enviornment to avoid handling or other types of mechanical damage.

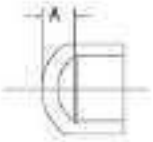
Limiting Oxygen index	60%	ASTM D2863
Modulus of Elasticity @73OF,psi	4.23x10*5	ASTM D638
Specific Gravity	1.52 - 1.53	ASTM D792
Tensile Strength,	8000 - 8400 Psi	ASTM D638
Compressive Strength, psi	9600	ASTM D695
Izod Impact (ft. lbs/inch, notched)	3.0	ASTM D256A
Coefficient of Linear Expansion, in./(in.oF)	3.4x10*-5	ASTM D696
Electrical Conductivity	Non - Conductor	N/A
Hazen-Williams C Factor	150	-
Poisson's Ratio	0.35 - 0.38	-
Thermal Conductivity, BTU/hr./ft2/oF/in	0.95	ASTM C177
Working Stress, @73OF, psi	2000	ASTM D1598

Disclaimer:
The above specifications are taken from a reputed manufacturers catalogue and are subject to change anytime.

CAPS

V5017





Caps

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5017-007	3/4"	19	0.04	0.02	0.31	8	S
V5017-010	1"	25	0.06	0.03	0.39	10	S
V5017-012	1-1/4"	31	0.22	0.1	0.56	14	S
V5017-015	1-1/2"	40	0.3	0.14	0.68	17	S
V5017-020	2"	50	0.42	0.19	0.68	17	S
V5017-025	2-1/2"	65	0.62	0.28	1.2	30	S
V5017-030	3"	75	0.96	0.44	1.26	32	S

COUPLINGS

V5001
V5001-R





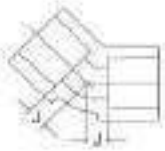
Couplings

Viking Part Number	Nominal Size		Approx. Wght.		Dimension A		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5001-007	3/4	19	0.06	0.03	0.12	3	SXS
V5001-010	1	25	0.08	0.04	0.09	2	SXS
V5001-012	1-1/4	31	0.12	0.05	0.08	2	SXS
V5001-015	1-1/2	40	0.23	0.1	0.27	7	SXS
V5001-020	2	50	0.44	0.2	0.28	7	SXS
V5001-025	2-1/2	65	0.72	0.33	0.2	5	SXS
V5001-030	3	75	1.1	0.5	0.22	6	SXS
V5001R-131	1x3/4	25x19	0.08	0.04	0.29	7	SXS
V5001R-168	1-1/4x1	31x25	0.12	0.05	0.35	9	SXS
V5001R-212	1-1/2x1-1/4	40x31	0.38	0.17	0.51	13	SXS
V5001R-211	1-1/2x1	40x25	0.36	0.16	0.67	17	SXS
V5001R-210	1-1/2x3/4	40x19	0.34	0.15	0.8	20	SXS
V5001R-261	2x1-1/2	50x40	0.49	0.22	0.51	13	SXS
V5001R-249	2x1	50x25	0.48	0.22	0.75	19	SXS

ELBOWS

V5006



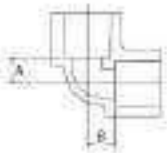


45° Elbows

Viking Part Number	Nominal Size		Approx. Wght.		Dimension J		Joint
	IN.	mm	lb.	kg	IN.	mm	
V5006-007	3/4	19	0.06	0.03	0.32	8	SXS
V5006-010	1	25	0.12	0.05	0.39	10	SXS
V5006-012	1-1/4	31	0.18	0.08	0.48	12	SXS
V5006-015	1-1/2	40	0.36	0.16	0.47	12	SXS
V5006-020	2	50	0.54	0.24	0.58	15	SXS
V5006-025	2-1/2	65	1	0.45	0.65	17	SXS
V5006-030	3	75	1.28	0.57	0.76	19	SXS

V5007
V5007-R





90° Elbows

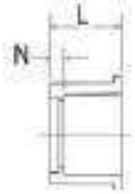
Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					A		B		
	IN.	mm	lb.	kg	IN.	mm	IN.	mm	
V5007-007	3/4	19	0.08	0.04	0.56	14	0.56	14	SXS
V5007-010	1	25	0.14	0.06	0.69	18	0.69	18	SXS
V5007-012	1-1/4	31	0.22	0.10	0.91	23	0.91	23	SXS
V5007-015	1-1/2	40	0.41	0.18	1.06	27	1.06	27	SXS
V5007-020	2	50	0.83	0.37	1.24	31	1.24	31	SXS
V5007-025	2-1/2	65	1.16	0.52	1.5	38	1.5	38	SXS
V5007-030	3	75	1.66	0.74	1.81	46	1.81	46	SXS
V5007R-131	1x3/4	25x19	0.12	0.05	0.61	15	0.75	19	SXS

BUSHINGS

Bushings

V5018





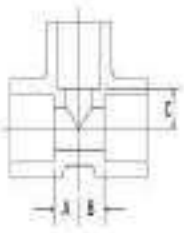
Viking Part Number	Nominal Size		Approx. Wght.		Dimensions				Joint
					L		N		
	IN.	mm	lb.	kg.	IN.	mm	IN.	mm	
V5018-131	1x3/4	25x19	0.04	0.02	1.26	33	0.29	7	SPGXS
V5018-168	1-1/4x1	31x25	0.08	0.04	1.41	36	0.29	7	SPGXS
V5018-167	1-1/4x3/4	31x19	0.10	0.05	1.41	36	0.41	10	SPGXS
V5018-212	1-1/2x1-1/4	40x31	0.07	0.03	1.54	39	0.27	7	SPGXS
V5018-211	1-1/2x1	40x25	0.12	0.05	1.54	39	0.39	10	SPGXS
V5018-210	1-1/2x3/4	40x19	0.16	0.07	1.54	39	0.53	13	SPGXS
V5018-251	2x1-1/2	50x40	0.16	0.07	1.66	42	0.27	7	SPGXS
V5018-250	2x1-1/4	50x31	0.20	0.09	1.66	42	0.4	10	SPGXS
V5018-249	2x1	50x25	0.22	0.10	1.66	42	0.52	13	SPGXS
V5018-248	2x3/4	50x19	0.22	0.10	1.66	42	0.64	16	SPGXS
V5018-292	2-1/2x2	65x50	0.24	0.11	1.94	49	0.44	11	SPGXS
V5018-291	2-1/2x1-1/2	65x40	0.36	0.16	1.94	49	0.57	14	SPGXS
V5018-290	2-1/2x1-1/4	65x31	0.40	0.18	1.94	49	0.68	17	SPGXS
V5018-289	2-1/2x1	65x25	0.47	0.21	1.94	49	0.81	21	SPGXS
V5018-339	3x2-1/2	75x65	0.47	0.21	2.42	61	0.6	15	SPGXS
V5018-338	3x2	75x50	0.66	0.30	2.42	61	0.93	24	SPGXS
V5018-337	3x1-1/2	75x40	0.73	0.33	2.42	61	1.03	26	SPGXS

TEES

Tees

V5011





Viking Part Number	Nominal Size		Approx. Wght.		Dimensions						Joint
					A		B		C		
	IN	mm	lb.	kg	IN.	mm	IN.	mm	IN.	mm	
V5011-007	3/4	19	0.1	0.04	0.57	14	0.57	14	0.57	14	SXSXS
V5011-010	1	25	0.17	0.08	0.69	18	0.69	18	0.69	18	SXSXS
V5011-012	1-1/4	33	0.28	0.12	0.89	23	0.89	23	0.89	23	SXSXS
V5011-015	1-1/2	40	0.58	0.26	1.05	27	1.05	27	1.05	27	SXSXS
V5011-020	2	50	0.82	0.37	1.25	32	1.25	32	1.25	32	SXSXS
V5011-025	2-1/2	65	1.4	0.62	1.53	39	1.53	39	1.53	39	SXSXS
V5011-030	3	75	2.14	0.96	1.84	47	1.84	47	1.84	47	SXSXS
V5011R-102	3/4x3/4x1	19x19x25	0.14	0.06	0.7	18	0.7	18	0.73	19	SXSXS
V5011R-131	1x1x3/4	25x25x19	0.16	0.07	0.61	15	0.61	15	0.94	24	SXSXS